

Switch Mode Power Supplies Encapsulated Constant Voltage

TLD1020-24

Description:

The TLD1020-24 is a compact and lightweight Constant Voltage Switch Mode Power Supply. Waterproof design within a 2x4 J box, IP66, NEMA 4 suitable for dry and damp locations. Convection cooled plastic housing. Designed for outdoor and indoor applications. Some typical applications include LED's, Lighting, etc.

Specifications (@25C)

Electrical Specifications:

Input Voltage: 90-264Vac Input Frequency Range (1): 47-63Hz

 Max Input Current:
 0.6A @ 115Vac; 0.3A @ 230Vac

 Max Inrush Current:
 <5A@115Vac, 10A@220Vac</td>

 Power Factor:
 >0.9 at full load, 115Vac

 Output:
 24Vdc±5%, .830Adc Max

Crest Factor (lpk): 1.5 Max. Leakage Current: 300µA Typical

Efficiency: 84% Typical at full load

Maximum power: 20W

Current Accuracy: ±1% (when applicable)

Load Regulation: ±3%

Hold up time: Half cycle minimum at 120 VAC and 80% of rated voltage **Protection:** Over-voltage, Over current and Short circuit protection:

Auto-recovery

Environmental Specifications:

Operating Temperature: -30 to 60°C (De-rating: 1%/°C from 60-70°C)

Storage Temperature: -40 to 85°C

Operating Humidity: 5 to 95% RH (non-Condensing)

Cooling: Convection cooling

Vibration: 5 to 50Hz

MTBF: >100,000 Hours at full load and 25°C ambient conditions
EMC: Compliant to 47CFR, Part 2, Part 15 and Cispr PUB, 22

Class B

General Specifications:

Connections: 5in leads - Input: 18 AWG; Output: 18 AWG

Dimensions (WxLxH): 40.0x95.0x25mm

Weight: 120g

Warranty: 3 years @ 40°C, 100% Load

Safety Standards:

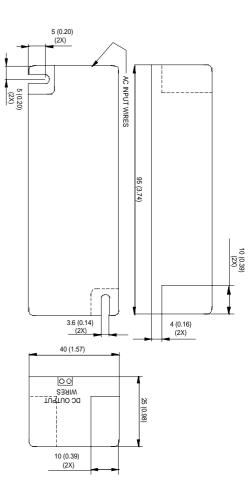
Standards: UL (cUL) 1310, UL48

CE



RoHS Compliance: This power supply meets the requirements 2002/95/EC, know as the RoHS initiative.

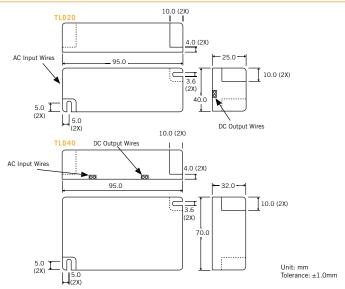




TLD1020/40 Series

20~40 Watt Single Output Encapsulated Switching Power Supply with Power Factor Correction for Indoor & Outdoor IP66 / NEMA 4 Applications





SPECIFICATIONS (@25°C)

Input Characteristics

Input Voltage: 90 - 264VAC Input Frequency Range: 47 - 63Hz

Power Factor: 0.9 at Full Load & 115 VAC

Crest Factor (Ipk): 1.5 Max

Max Input Current (max): TLD1020: 0.3/ 0.15A @ 115/230 VAC TLD040: 0.5/0.25a @ 115/230 VAC

Max Inrush Current: 5 / 10A @ 115 / 230 VAC (cold start)

Output Characteristics

Adjustment Range: Fixed Setpoint Accuracy ±5%

Current Accuracy: ±1% (when applicable)

Ripple/Noise (pk-pk 20MHz): ±5%

Regulation: $\pm 3.0\%$ Load / $\pm 3.0\%$ Line

Hold-up Time: 1/2 Cycle @ 120 VAC & 80% Load (min)

Over Current Protection: 120% (Auto-recovery)
Over Voltage Protection: 120% (Auto-recovery)

General Specifications

Dimension (LxWxH): TLD1020: 3.74 x 1.57 x 0.97" / 95 x 40 x 25mm

TLD1040: $3.74 \times 2.76 \times 1.26$ " / $95 \times 70 \times 32$ mm

Weight: 120

Reliability (MTBF) >100k hrs. (Full Load & 25°C Operation)

Warranty: 3 years

Environmental Specifications

Operating Temperature: -30~+60°C Full Load,

derate 1%/°C from 60~70°C max

Storage Temperature: -40~+85°C

Cooling: Convection Cooled Operation
Humidity: 5~95% RH, non-condensing
Vibration: 5 - 50Hz, 2G 1min / cycle,
period of 60min, each axis

EMC & Safety Specifications

EMC Emissions: Compliant to 47CFR, Part 2, Part 15

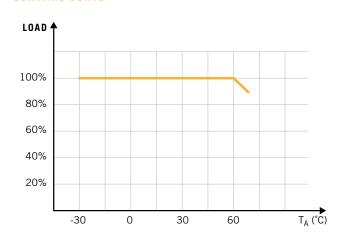
and Cispr PUB, 22

Class II Safety Approval: UL/cUL 1310, UL48, CE Mark (LVD)

CONNECTOR TYPES

Input: 18AWG Wire, 5 inch leads Output: 18AWG Wire, 5 inch leads

DERATING CURVE



Constant Voltage Models	Voltage	Current	Efficiency
TLD1020-12	12V	1.66A	84%
TLD1020-24	24V	0.83A	84%
TLD1040-12	12V	3.33A	84%
TLD1040-24	24V	1.67A	84%

Constant Current Models			
TLD1020-24-C0350	350mA	12~24V	84%
TLD1020-24-C0700	700mA	12~24V	84%
TLD1020-36-C0350	350mA	18~36V	84%
TLD1040-24-C1050	1050mA	12~24V	84%
TLD1040-36-C0700	700mA	18~36V	84%
TLD1040-36-C1050	1050mA	18~36V	84%

